CLAIMS

1. A method of detecting a Human Plasma Polypeptide (HPP), comprising the steps of:
    i) contacting a biological sample with an HPP-binding adsorbent; and
    ii) detecting and/ or quantifying binding of an HPP to the HPP-binding adsorbent.

2. The method of claim 1, wherein said biological sample is a plasma sample.

3. The method of claim 1, wherein said HPP-binding adsorbent is an HPP-specific antibody.

4. The method of claim 1, wherein the HPP-binding adsorbent is attached to a substrate.

5. The method of claim 1, wherein said detecting and/ or quantifying comprises a method selected from the group consisting of: radioimmunoassay, enzyme-linked immunoadsorption assay, retentate chromatography, protein array, surface enhanced laser desorption/ionisation, and mass spectrometry.

6. A protein array comprising an adsorbant specific for at least one Human Plasma Polypeptide (HPP).

7. A method of detecting an abnormal concentration of at least one Human Plasma Polypeptide (HPP) in an individual comprising the steps of:
    i) obtaining a sample from said individual;
    ii) determining a first level of said at least one HPP in said sample; and
    iii) comparing said level to that of a control sample;
    wherein a difference between the first level and the control level is diagnostic of an abnormal concentration of an HPP.

8. A pharmaceutical composition comprising an effective amount of an HPP-38 polypeptide and pharmaceutically acceptable carrier.

9. A method for the treatment of a cancer disease or a disease or condition associated with hyperplasia comprising administering an effective amount of an HPP-38 polypeptide to a mammal, including a human, suffering from said disease.

10. The method of claim 8 wherein the disease or condition associated with hyperplasia is a disease or condition selected from the group consisting of fibrosis, prostatic hyperplasia,

adrenal hyperplasia, endometrial hyperplasia, psoriasis, hyperplasia due to inflammation.

11. A method of identifying a modulator of a cancer disease or a disease or condition associated with hyperplasia comprising
    i) contacting a test compound with a HPP-38 polypeptide under sample conditions permissive for HPP-38 biological activity;
    ii) determining the level of said at least one HPP-38 biological activity;
    iii) comparing said level to that of a control sample lacking said test compound; and
    iv) selecting a test compound which causes said level to change for further testing as a HPP-38 modulator for the prophylactic and/or therapeutic treatment of a cancer disease or a disease or condition associated with hyperplasia.

12. A method according to claim 11, wherein the level of HPP-38 biological activity is measured by determining the level of expression of one or more genes set forth in Table 4.

13. A method for the prognosis or diagnosis of a cancer disease or a disease or condition associated with hyperplasia comprising detecting the plasma level of HPP-38, wherein an increased level is indicative of a cancer disease or a disease or condition associated with hyperplasia.

14. A method for the prognosis or diagnosis of a cancer disease or a disease or condition associated with hyperplasia comprising
    i) detecting a level of expression of at least one gene identified in Table 4 in a sample of a suitable tissue obtained from the subject to provide a first value; and
    ii) comparing the first value with a level of expression of the said gene from a disease-free subject, wherein a greater or smaller expression level in the subject sample compared to the sample from the disease-free subject is indicative of the subject being predisposed to or having a cancer disease or a disease or condition associated with hyperplasia.

15. A polypeptide comprising set forth in SEQ ID No: 397.

16. A non-amidated polypeptide comprising an amino acid sequence sequence set forth in SEQ ID No: 395 or SEQ ID No: 396.

17. A pharmaceutical composition comprising an effective amount of an HPP-13 polypeptide or a GPA101 polypeptide or a combination thereof and a pharmaceutically acceptable carrier.

18. A method for the treatment of a disease or condition associated with neurodegeneration comprising administering an effective amount of an HPP-13 or GPA101 polypeptide or a combination thereof to a mammal, including a human, suffering from said disease.

19. The method of claim 18 wherein the disease or condition associated with neurodegeneration is a disease or condition is selected from the group consisting of spinal cord injuries or CNS injuries, , Alzheimer's, Parkinson's, multiple sclerosis, ALS (amyotrophic lateral sclerosis), peripheral neuropathy, Guillian-Barré disease, diabetic neuropathy, demyelinating neuropathies.

20. A method of identifying a modulator of a disease or condition associated with neurodegeneration comprising

i) contacting a test compound with a HPP-13 or GPA101 polypeptide under sample conditions permissive for HPP-13 or GPA101 biological activity;

ii) determining the level of said at least one HPP-13 or GPA101 biological activity;

iii) comparing said level to that of a control sample lacking said test compound; and

iv) selecting a test compound which causes said level to change for further testing as a HPP-13 or GPA101 polypeptide modulator for the prophylactic and/or therapeutic treatment of a disease or condition associated with neurodegeneration.

21. A method according to claim 20, wherein the level of HPP-13 biological activity is measured by determining the level of expression of one or more genes set forth in Table 11.

22. A method for the prognosis or diagnosis of a disease or condition associated with neurodegeneration comprising detecting the plasma level of HPP-13 polypeptide, wherein an increased level is indicative of a disease or condition associated with neurodegeneration.

23. A method for the prognosis or diagnosis of a disease or condition associated with neurodegeneration comprising

i) detecting a level of expression of at least one gene identified in Table 11 in a sample of a suitable tissue obtained from the subject to provide a first value; and

ii) comparing the first value with a level of expression of the said gene from a disease-free subject, wherein a greater or smaller expression level in the subject sample compared to the sample from the disease-free subject is indicative of the subject being predisposed to or having a disease or condition associated with neurodegeneration.

24. A method for the treatment of a disease or condition associated with iron balance or iron transport comprising administering an effective amount of an HPP-13 polypeptide to a mammal, including a human, suffering from said disease.

25. The method of claim 24 wherein the disease or condition associated with iron balance or iron transport is selected from the group consisting of hemochromatosis, hereditary hemochromatosis, juvenile hemochromatosis, thalassemia, conditions related to iron-overload, anemia, sickle cell anemia.

26. A method of identifying a modulator of a disease or condition associated with iron balance or iron transport comprising

i) contacting a test compound with a HPP-13 polypeptide under sample conditions permissive for HPP-13 biological activity;

ii) determining the level of said at least one HPP-13 biological activity;

iii) comparing said level to that of a control sample lacking said test compound; and

iv) selecting a test compound which causes said level to change for further testing as a HPP-13 modulator for the prophylactic and/or therapeutic treatment of a disease or condition associated with iron balance or iron transport.

27. A method according to claim 26, wherein the level of HPP-13 biological activity is measured by determining the level of expression of one or more genes set forth in Table 6, 7, 8, 9 and/or 10.

28. A method for the prognosis or diagnosis of a disease or condition associated with iron balance or iron transport comprising detecting the plasma level of a HPP-13 polypeptide, wherein an increased level is indicative of a disease or condition associated with iron balance or iron transport.

29. A method for the prognosis or diagnosis of a disease or condition associated with iron balance or iron transport comprising

i) detecting a level of expression of at least one gene identified in Table 6, 7, 8, 9 and/or 10 in a sample of a suitable tissue obtained from the subject to provide a first value; and

ii) comparing the first value with a level of expression of the said gene from a disease-free subject, wherein a greater or smaller expression level in the subject sample

compared to the sample from the disease-free subject is indicative of the subject being predisposed to or having a disease or condition associated with iron balance or iron transport.

30. A pharmaceutical composition comprising an effective amount of an HPP-23 polypeptide and pharmaceutically acceptable carrier.

31. A method for the treatment of a disease with dysregulated serum glucose comprising administering an effective amount of an HPP-23 polypeptide to a mammal, including a human, suffering from said disease.

32. The method of claim 31 wherein the disease with dysregulated serum glucose is diabetes.

33. A method for the treatment of a metabolic disorder comprising administering an effective amount of an HPP-23 polypeptide to a mammal, including a human, suffering from said disease.

34. The method of claim 33 wherein the metabolic disorder is amyloidosis.

35. A method for reducing blood glucose levels in a mammal, including a human comprising administering an HPP-23 polypeptide to a said mammal.

36. A method of identifying a modulator of a disease with dysregulated serum glucose or a metabolic disorder comprising

i) contacting a test compound with a HPP-23 polypeptide under sample conditions permissive for HPP-23 biological activity;

ii) determining the level of said at least one HPP-23 biological activity;

iii) comparing said level to that of a control sample lacking said test compound; and

iv) selecting a test compound which causes said level to change for further testing as a HPP-23 modulator for the prophylactic and/or therapeutic treatment of a disease with dysregulated serum glucose or a metabolic disorder.

37. A method according to claim 36, wherein the level of HPP-23 biological activity is measured by determining the level of expression of one or more genes set forth in Table 12 or 14.

38. A method for the prognosis or diagnosis of a disease with dysregulated serum glucose or a metabolic disorder comprising detecting the plasma level of HPP-23, wherein an increased

level is indicative of a disease with dysregulated serum glucose or a metabolic disorder.

39. A method for the prognosis or diagnosis of a disease with dysregulated serum glucose or a metabolic disorder comprising

i) detecting a level of expression of at least one gene identified in Table 12 or 14 in a sample of a suitable tissue obtained from the subject to provide a first value; and

ii) comparing the first value with a level of expression of the said gene from a disease-free subject, wherein a greater or smaller expression level in the subject sample compared to the sample from the disease-free subject is indicative of the subject being predisposed to or having a disease with dysregulated serum glucose or a metabolic disorder.

40. A method according to claims 31 to 39 wherein the HPP-23 polypeptide is non-amidated.